

1. CLAIM AMENDMENTS (LISTING OF CLAIMS)

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Original) A method for assessing skeletal growth of a subject, comprising measuring the level of NT-CNP in a biological sample from the subject, and comparing the level against the mean NT-CNP level from a control population, where in a significant deviation in the measured level from the mean control level is indicative of abnormal skeletal growth.
2. (Currently Amended) ~~A method as claimed in~~ The method of claim 1, wherein the biological sample is plasma or whole blood.
3. (Currently Amended) ~~A method as claimed in~~ The method of claim 1, where said subject is a pre-adult.
4. (Currently Amended) ~~A method as claimed in~~ The method of claim 1, wherein ~~the~~ said subject is a pre-pubescent child or an infant.
5. (Currently Amended) ~~A method as claimed in~~ The method of claim 3, wherein ~~the~~ said subject is a neonate and the sample is a cord blood sample.
6. (Currently Amended) ~~A method as claimed in any one of claims 1 to 5~~ The method of claim 1, wherein ~~the~~ said subject is undergoing a treatment regimen, which may impact on skeletal growth in said subject.

7. (Currently Amended) ~~A method as claimed in any one of claims 1 to 5~~The method of claim 1, wherein ~~the said~~ subject is exposed to chemicals or other external factors which may impact on skeletal growth in said subject.
8. (Currently Amended) ~~A method as claimed in~~The method of claim 1, wherein ~~the said~~ measuring step comprises detecting binding between NT-CNP and a binding agent that selectively binds NT-CNP.
9. (Currently Amended) ~~A method as claimed in~~The method of claim 8, wherein ~~the said~~ binding agent is an antibody or antibody fragment.
10. (Currently Amended) ~~A method as claimed in~~The method of claim 9, wherein ~~the said~~ binding agent is a monoclonal antibody or monoclonal antibody fragment.
11. (Currently Amended) ~~A method as claimed in~~The method of claim 8, wherein the NT-CNP to which the binding agent selectively binds comprises an antigenic peptide selected from the group consisting of proCNP(1-103), proCNP(1-50), proCNP(1-81), and proCNP(51-81).
12. (Currently Amended) ~~A method as claimed in~~The method of claim 11, wherein the NT-CNP comprises proCNP(1-50).

13. (Currently Amended) ~~A method as claimed in any one of claims 8 to 12~~The method of claim 8, wherein binding of NT-CNP is measured using antibodies or antibody fragments that are ~~immobilised~~immobilized to a solid phase.
14. (Currently Amended) A method for predicting the skeletal growth potential of a subject ~~comprising~~comparing measuring the level of NT-CNP in a biological sample from said subject, and ~~comparing~~comprising the level against the mean NT-CNP level of a control population that has attained maximum skeletal growth and predicting from the NT-CNP level in the subject, skeletal growth potential of the subject.
15. (Currently Amended) A method for predicting the skeletal age of a subject comprising measuring the level of NT-CNP in a biological sample from said subject and comparing the level against the mean NT-CNP level of a control population of known skeletal ages, and predicting from the NT-CNP level in the subject, the skeletal age of the subject.
16. (Currently Amended) A method for diagnosing a skeletal disease or disorder in a subject comprising measuring the level of NT-CNP in a biological sample from said subject, and comparing the level against the mean NT-CNP level from a control population, wherein a significant deviation in the measured level from the mean control level is indicative of a skeletal disease or disorder.
17. (Currently Amended) ~~A method as claimed in any one of claims 14 to 16~~The method of claim 14, wherein ~~the~~said biological sample is plasma or whole blood.
18. (Currently Amended) ~~A method as claimed in any one of claims 14 to 16~~The method of

claim 14, wherein said subject is a pro-adult.

19. (Currently Amended) ~~A method as claimed in any one of claims 14 to 16~~The method of claim 14, wherein ~~thesaid~~ subject is a pre-pubescent child or an infant.
20. (Currently Amended) ~~A method as claimed in~~The method of claim 18~~16~~, wherein ~~thesaid~~ subject is a neonate and ~~thesaid biological sample is~~comprises cord blood sample.
21. (Currently Amended) ~~A method as claimed in any one of claims 14 to 16~~The method of claim 16, wherein the measuring step comprises detecting binding between NT-CNP and a binding agent that selectively binds NT-CNP.
22. (Currently Amended) ~~A method as claimed in~~The method of claim 21, wherein ~~thesaid~~ binding agent is an antibody or antibody fragment.
23. (Currently Amended) ~~A method as claimed in~~The method of claim 22, wherein ~~thesaid~~ binding agent is a monoclonal antibody or monoclonal antibody fragment.
24. (Currently Amended) ~~A method as claimed in~~The method of claim 21, wherein the NT-CNP to which ~~thesaid~~ binding agent selectively binds comprises an antigenic peptide selected from the group consisting of proCNP(1-103), proCNP(1-50), proCNP(1-81), and proCNP(51-81).

25. (Currently Amended) ~~A method as claimed in~~The method of claim 24, wherein ~~the~~said NT-CNP comprises proCNP(1-50).
26. (Currently Amended) ~~A method as claimed in any one of claims 21 to 25~~The method of claim 21, wherein binding of said NT-CNP is measured using antibodies or antibody fragments that are ~~immobilised~~immobilized to a solid phase.
27. (Currently Amended) ~~A method as claimed in~~The method of claim 26, wherein where a significant deviation from the mean control level is found in the sample, the method comprises a further step of comparing the measured NT-CNP level with one or more mean NT-CNP levels from populations having known skeletal diseases or disorders to make a more accurate diagnosis of the specific disease or disorder.
28. (Currently Amended) ~~A method as claimed in~~The method of claim 16, wherein ~~the~~said skeletal disease or disorder is selected from the group ~~comprising~~consisting of congenital disorders, delayed developmental disorders and advanced development syndromes.
29. (Currently Amended) A method of monitoring skeletal growth in a subject, comprising:
- (a) measuring the level of NT-CNP in a first biological sample from ~~the~~said subject and measuring the level of NT-CNP in a second biological sample, wherein ~~the~~said second biological sample is taken from the same subject as ~~the~~said first sample but at a later date; and
- (b) comparing the levels of NT-CNP in said first and said second samples, wherein a

significant change in the level of NT-CNP in said second sample from the level of NT-CNP in said first sample indicates a change in the rate of skeletal growth in said subject.

30. (Currently Amended) ~~A method as claimed in~~The method of claim 29, wherein the~~said~~ subject is undergoing a treatment regimen ~~which~~that may impact ~~on~~ skeletal growth of said subject.
31. (Currently Amended) ~~A method as claimed in any one of claims~~The method of claim 6~~and/or claim 30, wherein thesaid treatment regimen involves the administration of glucocorticoids to ~~the~~said subject.~~
32. (Currently Amended) ~~A method as claimed in~~The method of claim 31, wherein the~~said~~ subject is undergoing treatment for asthma or other chronic allergic states.
33. (Currently Amended) A kit for [measuring the level of NT-CNP in a biological sample comprising a binding agent that selectively binds to NT-CNP and which can be quantitatively measured upon binding to NT-CNP.] assessing skeletal growth, diagnosing a skeletal disease or disorder, or predicting skeletal growth potential or skeletal age in a subject, said kit comprising:

(a) means for measuring the level of NT-CNP in a biological sample obtained from said subject, comprising a binding agent that selectively binds to a NT-CNP molecule selected from the group consisting of proCNP(1-103), proCNP(1-50), proCNP(1-81), and proCNP(51-81), and which can be used to quantitatively measure NT-CNP; and

(b) instructions for assessing or monitoring said skeletal growth, predicting said skeletal

growth potential or said skeletal age, or diagnosing said skeletal disease or disorder in said subject from the NT-CNP level measured in said biological sample.

34. (Currently Amended) ~~A kit as claimed in~~The kit of claim 33, wherein the~~said~~ binding agent is selected from the group ~~comprising~~consisting of an anti-NT-CNP antibody, an NT-CNP receptor, ~~or~~and functional fragments or combinations thereof.
35. (Currently Amended) ~~A kit as claimed in~~The kit of claim 34, wherein the~~said~~ binding agent is a monoclonal antibody or a fragment thereof.
36. (Currently Amended) ~~A kit as claimed in claim 35, wherein the antibody is an antibody raised against an NT-CNP molecule selected from the group consisting of proCNP(1-103), proCNP(1-150), proCNP(1-81), and proCNP(51-81)~~An NT-CNP binding agent that selectively binds proCNP (1-50) or proCNP(1750).

37-43. (Canceled)